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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,961	03/28/2001	Xin Jin	85773-28C	2040

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EXAMINER	
YAO, KWANG BIN	
ART UNIT	**PAPER NUMBER**
2667	

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/818,961	JIN ET AL.	
	Examiner	Art Unit	
	Kwang B. Yao	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/7/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 4 and 8 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2 of prior U.S. Patent No. 6,304,561. This is a double patenting rejection.

The following is the comparison between the patented claims and the claims in the instant application. U.S. Patent No. 6,304,561 claims the following limitations: regarding claim 1, A CDMA receiver comprising: an input for receiving an RF signal that includes a plurality of components separable from one another; an analog signal processing stage connected to said input for processing the RF signal; a plurality of channels connected to said analog signal processing stage, each channel receiving a signal derived from a respective component of the RF signal, each channel including an effective noise figure regulation unit operative to introduce a

noise signal into the signal derived from the respective component of the RF signal for regulating an effective noise figure of the signal derived from the respective component of the RF signal, said noise figure regulation unit including a noise generator to generate said noise signal, said noise generator producing either one of a random and pseudo-random noise, said noise figure regulation unit being capable to: a) measure a power of the signal derived from a respective component of the RF signal including the noise signal; b) regulate a variance of the noise signal; regarding claim 2, a method for regulating an effective noise figure of a signal in a multi-channel CDMA receiver, said method comprising: acquiring a signal; separating the signal into a plurality of components; introducing each component in a respective channel of the CDMA receiver; in each channel, gene rating a noise signal and introducing the noise signal into the component received in the channel, for regulating an effective noise figure of the component independently from other channels of the CDMA receiver, the noise signal being either one of a random and pseudo-random noise; in each channel, measuring a power of the component including the noise signal to compute a variance of the noise signal.

The instant application discloses the following limitations: regarding claim 4, A CDMA receiver comprising: an input for receiving an RF signal that includes a plurality of components separable from one another; an analog signal processing stage connected to said input for processing the RF signal; a plurality of channels connected to said analog signal processing stage, each channel receiving a signal derived from a respective component of the RF signal, each channel including an effective noise figure regulation unit operative to generate a noise signal and introduce the noise signal into the signal derived from the respective component of the RF signal for regulating an effective noise figure of the signal derived from the respective

component of the RF signal, said noise figure regulation unit further operative to regulate a variance of the noise signal; wherein said effective noise figure regulation unit includes a noise generator to generate said noise signal; wherein said noise generator produces either one of a random and pseudo-random noise; wherein said noise figure regulation unit is operative to measure a power of the signal derived from a respective component of the RF signal including the noise signal; regarding claim 8, a method for regulating an effective noise figure of a signal in a multi-channel CDMA receiver, said method comprising: acquiring a signal; separating the signal into a plurality of components; introducing each component in a respective channel of the CDMA receiver; in each channel, generating a noise signal and introducing the noise signal into the component received in the channel, for regulating an effective noise figure of the component independently from other channels of the CDMA receiver; and in each channel, measuring a power of the component including the noise signal to compute a variance of the noise signal; wherein said noise generator produces either one of a random and pseudo-random noise.

As stated above, it is clearly seen that the identical subject matters are defined are by both the claims 4, 8 of the instant application and claims 1, 2 of the U.S. Patent No. 6,304,561.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 2, 3 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,304,561. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the patented claims by not claiming some elements.

The following is the comparison between the patented claims and the claims in the instant application. U.S. Patent No. 6,304,561 claims the following limitations: regarding claim 1, A CDMA receiver comprising: an input for receiving an RF signal that includes a plurality of components separable from one another; an analog signal processing stage connected to said input for processing the RF signal; a plurality of channels connected to said analog signal processing stage, each channel receiving a signal derived from a respective component of the RF signal, each channel including an effective noise figure regulation unit operative to introduce a noise signal into the signal derived from the respective component of the RF signal for regulating an effective noise figure of the signal derived from the respective component of the RF signal, said noise figure regulation unit including a noise generator to generate said noise signal, said

noise generator producing either one of a random and pseudo-random noise, said noise figure regulation unit being capable to: a) measure a power of the signal derived from a respective component of the RF signal including the noise signal; b) regulate a variance of the noise signal; regarding claim 2, a method for regulating an effective noise figure of a signal in a multi-channel CDMA receiver, said method comprising: acquiring a signal; separating the signal into a plurality of components; introducing each component in a respective channel of the CDMA receiver; in each channel, gene rating a noise signal and introducing the noise signal into the component received in the channel, for regulating an effective noise figure of the component independently from other channels of the CDMA receiver, the noise signal being either one of a random and pseudo-random noise; in each channel, measuring a power of the component including the noise signal to compute a variance of the noise signal.

The instant application discloses the following limitations: regarding claim 1, A CDMA receiver comprising: an input for receiving an RF signal that includes a plurality of components separable from one another; an analog signal processing stage connected to said input for processing the RF signal; a plurality of channels connected to said analog signal processing stage, each channel receiving a signal derived from a respective component of the RF signal, each channel including an effective noise figure regulation unit operative to generate a noise signal and introduce the noise signal into the signal derived from the respective component of the RF signal for regulating an effective noise figure of the signal derived from the respective component of the RF signal, said noise figure regulation unit further operative to regulate a variance of the noise signal; regarding claim 2, wherein said effective noise figure regulation unit includes a noise generator to generate said noise signal; regarding claim 3, wherein said noise

generator produces either one of a random and pseudo-random noise; regarding claim 6, A method for regulating an effective noise figure of a signal in a multi-channel CDMA receiver, said method comprising: acquiring a signal; separating the signal into a plurality of components; introducing each component in a respective channel of the CDMA receiver; in each channel, generating a noise signal and introducing the noise signal into the component received in the channel, for regulating an effective noise figure of the component independently from other channels of the CDMA receiver; and in each channel, measuring a power of the component including the noise signal to compute a variance of the noise signal.

It is clearly seen that claim 1 of the instant application discloses all the claim limitations in claim 1 of the U.S. Patent No. 6,304,561 but the limitations of: wherein said effective noise figure regulation unit includes a noise generator to generate said noise signal; wherein said noise generator produces either one of a random and pseudo-random noise; wherein said noise figure regulation unit is operative to measure a power of the signal derived from a respective component of the RF signal including the noise signal. Claim 2 of the instant application discloses all the claim limitations in claim 1 of the U.S. Patent No. 6,304,561 but the limitations of: wherein said noise generator produces either one of a random and pseudo-random noise; wherein said noise figure regulation unit is operative to measure a power of the signal derived from a respective component of the RF signal including the noise signal. Claim 3 of the instant application discloses all the claim limitations in claim 1 of the U.S. Patent No. 6,304,561 but the limitations of: wherein said noise figure regulation unit is operative to measure a power of the signal derived from a respective component of the RF signal including the noise signal. Claim 6 of the instant application discloses all the claim limitations in claim 2 of the U.S. Patent No.

6,304,561 but the limitations of: wherein said noise generator produces either one of a random and pseudo-random noise.

The application's claims are nearly identical in every other respect to the patent claims. Therefore, the application's claims are simply broader version of the patented claims. It is the examiner's position that broadening the patented claims by not claiming the above elements of the patented claims would have been obvious to one of the ordinary skill in the art in view of the patented claims. It is important to note that the instant application is a continuation of the application which yielded the patent (U.S. Patent No. 6,304,561) used herein as the basis for the obviousness type of double patenting rejection. The application is attempting to broaden the parent application's claims by eliminating some the claimed elements in the continuation at issue here.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hottinen et al. (US 6,449,266) discloses a data transmission method.

Citta et al. (US 6,044,083) discloses a synchronous CDMA communication system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER

Kwang B. Yao
October 6, 2004